

In the Claims:

1. (Currently Amended) An electronic device with a micro-electromechanical switch, comprising:

a piezoelectric element with a piezoelectric layer located between a first and a second electrode layer with at least one electrode being located in each of said electrode ~~layer~~ layers,

a first and a second MEMS electrode said first MEMS electrode being located on a surface of the piezoelectric element and said second MEMS electrode being located on the surface of a substrate so that the first MEMS electrode moves away from and/or towards the second MEMS electrode under the application of an actuating voltage to the piezoelectric element, and

~~characterized in that~~ wherein at least one of the electrode layers is structured into electrodes while defining a displacement area in the piezoelectric element in which displacement area the first MEMS electrode is located and which displacement area is, under the application of different ~~at least one~~ actuating voltages ~~voltage~~ to different ones of the electrodes, ~~capable of strong displacement~~ configured to displace away from and/or towards the substrate in relation to the rest of the piezoelectric element.

2. (Currently Amended) A device as claimed in claim 1, characterized in that the piezoelectric layer ~~is has been~~ polarized during manufacture in a polarization mode, and in that the electrodes are configured to apply ~~have been so defined that~~ an actuating voltage causing a local contraction of the piezoelectric layer ~~can be applied locally~~.

3. (Previously presented) A device as claimed in claim 1, characterized in that the piezoelectric layer curves to the left on one side of the displacement area and to the right on an opposite side.

4. (Previously presented) A device as claimed in claim 1, characterized in that the piezoelectric element is clamped to mechanical supports on a first and an opposite second side.

5. (Original) A device as claimed in claim 4, characterized in that the electrodes are defined symmetrically around the displacement area.

6. (Original) A device as claimed in claim 1, characterized in that each of the first and the second electrode layers contains at least two electrodes.

7. (Previously presented) An electronic device as claimed in claim 1, characterized in that the second electrode layer is a continuous metal layer while the first electrode layer contains at least three electrodes of which the middle electrode is essentially located opposite the second MEMS electrode.

8. (Previously presented) An electronic device as claimed in claim 7, characterized in that the first electrode layer is located on the surface facing the second MEMS electrode.

9. (Currently Amended) ~~A method for the preparation of an~~ An electronic device as claimed in claim 1, wherein the piezoelectric element is set configured for polarization in response to a polarization mode by the application of actuating voltages to the electrodes, wherein the piezoelectric layer is so polarized that the piezoelectric layer locally expands and contracts when suitable actuating voltages are applied in the operating mode.

10. (Currently Amended) ~~An application of an~~ electronic device as claimed in claim 1, further including a driver configured to apply ~~wherein the actuating voltages are so applied to the electrodes to cause that the piezoelectric layer to locally expand expands and contract contracts.~~

11. (Currently Amended) ~~An electronic device application~~ as claimed in claim 10, wherein the driver is configured to apply an actuating voltage, to effect effecting a local contraction of the piezoelectric layer, that is lower than an the actuating voltage applied in the direction of the polarization which has already been introduced.

12. (New) A micro-electromechanical switch comprising:
a substrate;
a MEMS electrode on a surface of the substrate;
over the MEMS electrode, a piezoelectric component having

a piezoelectric layer,
first and a second electrode layers on opposite sides of the piezoelectric layer, at least one of the electrode layers defining a displacement area of the piezoelectric component,
at least one electrode in one of the electrode layers,
at least two electrodes in another one of the electrode layers, and
a MEMS electrode located in the displacement area; and
a driver circuit configured to drive the electrodes in a polarization mode to apply a distribution of different operating voltages over the electrodes in the electrode layers and to polarize the piezoelectric layer, and drive the electrodes in an operating mode to displace the displacement area in a direction that is away from or towards the substrate, while maintaining other regions of the piezoelectric component stationary.

13. (New) A method of operating an electronic device with a micro-electromechanical switch, the method comprising:

in a piezoelectric element having a piezoelectric layer located between a first and a second electrode layer with at least one electrode being located in each of said electrode layers, applying a voltage to the electrode layers to polarize the piezoelectric element, and

applying an actuating voltage to a first and a second MEMS electrode, the second MEMS electrode being located on the surface of a substrate, to cause the first MEMS electrode to move away from and/or towards the substrate in relation to the rest of the piezoelectric element,

wherein said first MEMS electrode is located in a displacement area of said piezoelectric element defined by one of said electrode layers on a surface of the piezoelectric element.